

\* SWBAT define and interpret impulse

Sep 6-2:31 PM

# Welcome!!!

H. Leslie Grebe

- \* Pick up:
  - slip of paper (for later)



SECA Physics  
Monday 15 December 2014

## Opening Question:

A friend throws you a baseball and you don't have a mitt.

What do you do special when catching it? Why?

CRADLING THE BALL  
"GIVE" WITH IT

SLOWING DOWN  
SOMETHING  
Centering...

Sep 7-7:04 AM

## Impulse is CHANGE in momentum

How do you catch a baseball if you don't have a glove?

What about a (really full) water balloon?

What is it you are trying to adjust???

TIME TO STOP

BIG FORCE = OUCH  
RATHER SMALL FORCE

<http://www.youtube.com/watch?v=aMqM13EUSKw>

It takes TIME to change something's momentum

Dec 5-9:21 AM

## Impulse is CHANGE in momentum

GOING → STOPPED

Impulse = Force X Time

↓ × ↑

Safety: Big forces = OUCH!!!

When something stops, it changes momentum

Less OUCH if more TIME to stop!

BRAKES

= : EQUALS  
Δ : CHANGE IN

ESPN "Relaxing with Impulse"

<http://www.youtube.com/watch?v=aMqM13EUSKw>

It takes TIME to change something's momentum

Dec 5-9:21 AM

Name, date

Essential Question -- why do we "give with" or "cradle" a ball that is coming at us fast?

Use more than one complete sentence and the words:

Force, time, momentum, impulse

READ TO TABLE, DIFFERENT COLOR FOR ANY CHANGES

Dec 15-10:16 AM

### Daily 3 Questions

- \* Every day except test/project days
- \* 3 Questions on the topics of the day
- \* Main source of daily points
- \* I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your NAME!!!

CP: Look up "impulse" and write two sentences. 1) Use impulse in everyday / most common meaning. 2) Use impulse with physics meaning.

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. Impulse is change in
  - a) work
  - b) power
  - c) momentum
2. IMPULSE = Force X time =  $\Delta \text{mom.}$
3. Why do you "give" when catching a baseball barehanded?
  - a. To take more time and have less force
  - b. To take less time and change speed more
  - c. To do less work

Dec 2-7:55 AM